CLAIMS

WE CLAIM:

1. An easy open can end member comprising:

a central panel centered about a longitudinal axis having a substantially planar peripheral edge and a tear panel defined by fracturable score, the tear panel retained to the central panel along a non-scored hinge region;

a curl defining an outer perimeter of the end member;

a circumferential chuckwall extending downwardly from the curl; and

a transition wall connecting the chuckwall with the substantially planar peripheral edge of the central panel, the transition wall comprising a folded portion.

2. The easy open can end member of Claim 1 wherein the folded portion extends outwardly relative to the longitudinal axis.

3. The easy open can member of Claim 2 wherein the folded portion further extends upwardly relative to the central panel.

4. The easy open can member of Claim 1 wherein the fold has a length less than a length of the curl.

5. The easy open can member of Claim 1 wherein the chuckwall extends downwardly from the curl at an obtuse angle and the folded portion has a thickness that is substantially less than a length of the chuckwall.

6. The easy open can member of Claim 1 wherein the folded portion comprises an annular concave bend extending downwardly from the chuckwall and an annular convex bend extending upwardly from the annular concave bend and interconnected to the central panel.

7. The easy open can end member of Claim 6 wherein the folded portion further comprises a third bend joining the annular convex bend with the central panel.

8. The easy open can end member of Claim 7 wherein the third bend has a radius of curvature substantially defined by a lower extent of the annular concave bend.

9. The easy open can end member of Claim 1 wherein the folded portion includes an annular concave portion in engagement with the peripheral edge of the central panel.

10. The easy open can end member of Claim 9 wherein the concave annular portion includes an apex, the apex being in engagement with the peripheral edge of the central panel.

11. The easy open can end member of Claim 1 wherein the folded portion further extends upwardly relative to the central panel, the folded portion having a thickness which is substantially less than a length of the chuckwall.

12. An easy open can end member comprising:

a central panel centered about a longitudinal axis having a

substantially planar peripheral edge;

a curl defining an outer perimeter of the end member;

a circumferential chuckwall extending downwardly from the curl; and

a transition wall connecting the chuckwall with the substantially planar peripheral edge of the central panel, the transition wall comprising a folded portion extending outwardly relative to the longitudinal axis.

13. The easy open can member of Claim 12 wherein the folded portion further extends upwardly relative to the central panel.

14. The easy open can member of Claim 13 wherein the fold has a length less than a length of the curl.

15. The easy open can member of Claim 12 wherein the chuckwall extends downwardly from the curl at an obtuse angle and the folded portion has a thickness that is substantially less than a length of the chuckwall.

16. The easy open can member of Claim 12 wherein the folded portion comprises an annular concave bend extending downwardly from the chuckwall and an annular convex bend extending upwardly from the annular concave bend and interconnected to the central panel.

17. The easy open can end member of Claim 16 wherein the folded portion further comprises a third bend joining the annular convex bend with the central panel.

18. The easy open can end member of Claim 17 wherein the third bend has a radius of curvature substantially defined by a lower extent of the annular concave bend.

19. The easy open can end member of Claim 18 wherein the folded portion includes an concave annular portion in engagement with the peripheral edge of the central panel.

20. The easy open can end member of Claim 19 wherein the concave annular portion includes an apex, the apex being in engagement with the peripheral edge of the central panel.

21. The easy open can end member of Claim 20 wherein the folded portion further extends upwardly relative to the central panel.

22. The easy open can end member of Claim 21 wherein the folded portion has a thickness which is substantially less than a length of the chuckwall.

23. An easy open can end member comprising:

a central panel centered about a longitudinal axis having a substantially planar peripheral edge, a public side and a product side;

a curl defining an outer perimeter of the end member;

a circumferential chuckwall extending downwardly from the curl; and

a transition wall connecting the chuckwall with the peripheral edge of the central panel, the transition wall comprising a fold including a concave annular portion engaging the peripheral

edge of the central panel.

24. The easy open can end member of Claim 23 wherein the concave annular portion engages the public side of the peripheral edge of the central panel.

25. The easy open can end member of Claim 24 wherein the concave annular portion includes an apex, the apex engaging public side of the peripheral edge of the central panel.

26. The easy open can end member of Claim 23 wherein the fold further includes a convex annular portion joined to the concave annular portion and interconnected to the peripheral edge of the central panel.

27. The easy open can end member of Claim 26 wherein the fold further includes a third bend joining the convex annular portion to the peripheral edge of the central panel.

28. The easy open can end member of Claim 27 wherein the fold has a thickness less than a length of the chuckwall.

29. The easy open can end member of Claim 23 wherein the fold includes a portion extending outwardly relative to the longitudinal axis.

30. The easy open can end member of Claim 29 wherein the portion of the fold further extends upwardly relative to the central panel.

31. An easy open can end member comprising:

a central panel centered about a longitudinal axis;

a curl defining an outer perimeter of the end member;

a circumferential chuckwall extending downwardly from the curl at an obtuse angle; and

a transition wall connecting the chuckwall with the central panel, the transition wall comprising a fold having a portion extending outwardly relative to the longitudinal axis and upwardly relative to the central panel wherein the fold has a thickness which is substantially less than a length of the chuckwall.

32. An easy open can member comprising:

a central panel centered about a longitudinal axis having a peripheral edge;

a curl defining an outer perimeter of the end member and adapted for connecting the end member to a container body;

a circumferential chuckwall extending downwardly from the curl; and

a transition wall connecting the chuckwall with the peripheral edge of the central panel, the transition wall comprising a fold extending outwardly relative to the longitudinal axis and upwardly relative to the central panel and having a length less than a length of the curl.

33. An easy open can end member comprising:

a central panel centered about a longitudinal axis having a peripheral edge, a public side and a product side;

a curl defining an outer perimeter of the end member;

a circumferential chuckwall extending downwardly from the

curl; and

a transition wall connecting the chuckwall with the peripheral edge of the central panel, the transition wall comprising a fold including a concave annular portion having an apex in engagement with the public side of the peripheral edge of the central panel.

34. An easy open can end member comprising:

a central panel centered about a longitudinal axis having a substantially planar peripheral edge, a public side and a product side;

a curl defining an outer perimeter of the end member;

a circumferential chuckwall extending downwardly from the curl; and

a transition wall connecting the chuckwall with the peripheral edge of the central panel, the transition wall comprising a fold including a first leg extending downwardly from the chuckwall to a concave annular portion having a first apex in engagement with the public side of the peripheral edge of the central panel, a second leg extending upwardly from the convex annular portion to a convex annular portion, and a third leg extending downwardly from the convex annular portion to a radial bend portion joined to the peripheral edge of the central panel.

35. A method for forming an easy open can end member, the method comprising the steps of:

providing a can end shell including a central panel centered about a longitudinal axis having a peripheral edge, a public side and a product side, a curl defining an outer perimeter of the can end shell, and a circumferential chuckwall extending downwardly from

the curl joined to a transition wall; and

reforming the transition wall to form a fold having a portion extending outwardly relative to the longitudinal axis.

36. The method of Claim 35 further comprising the step of reforming the central panel to form a substantially planar peripheral edge.

37. The method of Claim 35 wherein the can end shell further includes a hinge point between the chuckwall and the transition wall.

38. The method of Claim 37 wherein fold is initiated at the hinge point.

39. The method of Claim 37 wherein the hinge point is created by a coining step.

40. The method of Claim 37 further comprising the step of providing relative movement between the central panel and the hinge point wherein the hinge point towards the peripheral edge of the central portion and the portion of fold moves outwardly relative to the longitudinal axis.

41. The method of Claim 40 further comprising the step of providing relative movement between the portion of the fold and the central panel wherein the portion of the fold extends upwardly relative to the central panel.

42. The method of Claim 41 further comprising the step of

continuing providing relative movement between the portion of the fold and the central panel until the portion of the fold is substantially perpendicular to the central panel.

43. The method of Claim 41 further comprising the step of continuing providing relative movement between the portion of the fold and the central panel until the hinge point engages the peripheral edge of central panel.